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Sauget Area 1 Superfund Site

Meeting

Taken on: March 05, 2013

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U.S. Environmental Protection Agency

Community Involvement Meeting

for

Sauget Area 1 and Area 2 Superfund Sites

Villages of Sauget and Cahokia,

St. Clair County, Illinois

March 5, 2013

1 A Community Involvement Meeting was
2 held at the offices of the Cahokia Village Hall, 103
3 Main Street, in the Village of Cahokia, State of
4 Illinois, on the 5th day of March, 2013 which was
5 recorded by means of machine shorthand and hereto
6 transcribed by Mary L. Peppenhorst, Missouri
7 Certified Court Reporter (No. 545), Illinois
8 Certified Shorthand Reporter (IL #084-003856),
9 Registered Professional Reporter (#804416) and
10 Notary Public.

1 APPEARANCES:

2 FOR THE EPA:

3 Ms. Patricia Krause

4 Community Involvement Coordinator

6 Ms. Stephanie Linebaugh

7 Remedial Project Manager

9 Mr. Paul Lake

10 Illinois EPA

12 Ms. Lisa Condiff

13 Mr. Phil Smith

14 Mr. Barry Selco

15 CH2M Hill

1 (On the record at 6:35 p.m.)

2

3 MS. KRAUSE: Hello. Thank you for coming
4 out tonight and we look forward to presenting and to
5 hearing from you. U.S. Environmental Protection
6 Agency's presentation will share details about the
7 recommended cleanup plan for the Sauget area one
8 superfund site. You will have the opportunity to
9 formally make a comment or ask a question. We have
10 a transcriber here to take your comments and
11 questions. During this public hearing part we don't
12 necessarily respond to the questions or the
13 comments. At the end of the comment period which
14 now is March 28th the EPA will prepare a written
15 statement, written summary, of significant comments
16 and any new, relevant information given along with
17 EPA's response to each issue. We'll do a
18 presentation -- for today we'll do the presentation.
19 We'll take some questions. We'll have a short break
20 right after the question part and then we'll start
21 the actual public hearing where you will ask your
22 questions and Mary, the transcriber, will have it on
23 the record and then we'll compile all the questions.
24 Now -- all the questions and comments. And all the

1 questions and comments from here and also if you all
2 got a fact sheet there was comment paper in there
3 that you could write a comment and mail it back to
4 us or you could go on the Internet and there's a
5 public comment form. So we try to make it as easy
6 as possible. My e-mail is on the fact sheet if you
7 want to e-mail me about anything, you know, that
8 would be fine or Stephanie. So for introductions
9 I'm Patricia Krause, I work as a community contact
10 or community involvement coordinator for the US EPA.
11 Stephanie Linebaugh is EPA's project manager for the
12 Sauget area one site and she will talk about the
13 site and explain EPA's proposed cleanup plan.

14 We have Tom Martin here. He's our regional
15 counsel in region five. And we also have a number
16 of people from the EPA and I believe Stephanie is
17 going to -- Illinois EPA and I believe Stephanie is
18 going to introduce them. So now Stephanie will
19 present but when it's your turn, if you want to make
20 your public comments, I'll call out your name -- I
21 don't have the list, I'm sorry, I'm confused. You
22 can come up and state your first and last name and
23 what organization you're affiliated with when you
24 make your comments. So Stephanie I'll -- Thank you.

1 BY MS. LINEBAUGH:

2 Thank you Patty. Hello. Thank you so much
3 for coming this evening. As Patty said I'm
4 Stephanie Linebaugh. I'm the EPA project manager
5 for the site and I'm going to give you a
6 presentation on EPA's proposed plan for the Sauget
7 area one site. Can everyone see the screen okay? I
8 don't know if it's too light. We'll do quick
9 introductions. As Patty said there's some Illinois
10 EPA people here as well as EPA contractors. I'll go
11 through you the presentation for the proposed plan,
12 we'll answer some questions, we'll take a short
13 break as Patty stated, and then we'll open it up for
14 the hearing comments. Again, I'm Stephanie
15 Linebaugh, the EPA project manager. Patty Krause is
16 EPA community involvement Coordinator. Tom Martin
17 is the EPA site attorney. Lisa Condif is with CH2M
18 Hill. She is EPA's oversight contractor, site
19 manager. Phil Smith is also with CH2M Hill as the
20 EPA's oversight contractor, as is Barry Selco who is
21 again, one of EPA's oversight contractors and also
22 our risk assessor. With Illinois EPA is Paul Lake
23 who is the Illinois EPA project manager. This is --
24 can you maybe adjust the lighting? Is that better?

1 Okay. Okay.

2 Again, this is just an overview of the site
3 and the site is located in both Sauget and Cahokia,
4 Illinois and it contains several parcels which I'll
5 identify in more detail. Little bit of a site
6 history. The site consists of three closed waste
7 disposal facilities. Site G -- There's three
8 disposal facilities. There's Sites G which is just
9 off Queeny Avenue and this is Route 3 -- G, H and I.
10 There's a former backfill impoundment which is Site
11 L. Site M is a former borrow pit which used to be
12 hydraulically connected to the Dead Creek. And a
13 closed construction debris site, Site N. And it
14 also consists of approximately 3.2-miles of Dead
15 Creek which extends further south and goes off the
16 map.

17 This is just an overview of -- you can see
18 the entire site here, Dead Creek, borrow pit lake.
19 And a couple other things to point out here on this
20 you can see that the site is approximately about a
21 mile from the Mississippi River close to the
22 Krummrich facility and this is also another
23 superfund site in between the two.

24 Contamination history: A variety of

1 industrial municipal waste and containment soils
2 were present at the enclosed disposal waste areas.
3 Disposal areas contain crushed drums, uncontained
4 waste, construction debris and miscellaneous trash.
5 Contaminants include a variety of volatile and
6 semi-volatile compounds such as chlorobenzene,
7 benzene, PCBs, dioxins and metals.

8 There's been a lot of work done over the
9 years on the site towards cleaning up. Starting in
10 the early 90s, in 1990 creek segment 8, access A
11 which is located on the Cerro flow property. That
12 was remediated through an order with the Illinois
13 EPA that required the PRPs to clean up this area of
14 segment A.

15 From '94 to 95 EPA did a removal action on
16 site G here. There was some instantaneous
17 combustion on the surface of the site that caused
18 EPA to come out, address that. We did some waste
19 consolidation and cover of site G, a part of site G.
20 In 1999 there was another removal action where EPA
21 ordered the responsible parties to replace two
22 culverts in Dead Creek.

23 And then in 1999 EPA ordered responsible
24 parties to do the remedial investigation and

1 feasibility study. Which the remedial investigation
2 is the investigation to determine the nature and
3 extent of the contamination site. In '99 to 2000
4 initial work on the remedial investigation started
5 with extensive site investigation. And then there
6 was another removal action in that 2000 that was
7 completed in 2008 that required the PRPs, the
8 responsible parties, to address and excavate
9 sediments of Dead Creek as well as creek bottom
10 soils. Also during that removal action they were
11 required to construct a containment cell and that
12 containment cell is located right here behind Site G
13 just off Judith Lane. That's where they disposed of
14 the sediments and the creek bottom soils from Dead
15 Creek.

16 From 2002 to 2007 the responsible parties
17 were required to do supplemental and followup
18 investigations for the remedial investigation to
19 determine again the nature and extent of the
20 contamination site. This remedial investigation and
21 feasibility study was completed and finalized in
22 report this past November of 2012.

23 Just a quick overview of the removal action
24 along Dead Creek. Again, I said that there were

1 sediments and the creek bottom soils were excavated
2 from the creek. Approximately 53,000 cubic yards of
3 sediments were removed and then an additional 5,000
4 cubic yards of creek bottom soils.

5 For a quick summary of the investigation
6 results due to the remedial investigation there were
7 containment source areas identified. Those included
8 the disposal areas at site G, H and I South. And
9 this is Queeny Avenue here (indicating). This the
10 Falling Springs Road (indicating). There's some
11 residual dense nonaqueous phase liquid or we call it
12 DNAPL in ground water in the lion portions of the
13 site at G, H and I South which are also continuing
14 sources of contamination.

15 Site I South there is an area where there is
16 pools of this DNAPL which is kind of like presolvent
17 in the ground water that's been identified there.
18 They've actually been pumping this DNAPL for the
19 past few years. Along Queeny Avenue between sites I
20 South and H underneath the road there is a corridor
21 where there's heavily contaminated soils that are
22 contaminated with PCBs and dioxins. And I wanted to
23 point out on site I North and Site N those areas
24 were not identified as contaminant source areas.

1 We did a human health risk assessment,
2 actually there was a couple, and evaluated
3 residents, trespassers, recreational users,
4 industrial workers, construction workers and utility
5 workers. They were evaluated for potential
6 exposures to soils, waste, ground water, surface
7 water and sediments. And Benzene, chlorobenzene,
8 PCBs and dioxins were some of the primary
9 contaminants of concern risk drivers.

10 Sites with no potential human health risk
11 were Site I North, Site M, Site N, the flood plain
12 soils along Dead Creek, Dead Creek and borrow pit
13 lake. Sites with potential risks were sites G, H, I
14 South and L. We also looked at the ecological risk
15 assessments. Potential ecological habitat areas
16 were evaluated. We looked at the flood plain soils
17 along Dead Creek, surface water, sediments
18 associated with Dead Creek and borrow pit lake and
19 potential impact, sufficient wildlife after the
20 completion of the 2001 Dead Creek removal action.
21 There were no economical risks identified.

22 Now I'll go in to just -- this is a quick
23 summary overviewing the five alternatives that EPA
24 evaluated or that were evaluated in the feasibility

1 study. And as you can see there's everywhere from
2 no action up to more substantial alternatives that
3 have more elements and components. You'll see that
4 several of them have similar components in each
5 alternative and I'll go over each one in more
6 detail.

7 Alternative 1 no action and EPA always
8 includes a no action alternative for comparison.
9 It's kind of our baseline. No action. Zero cost.

10 Alternative 2 is just the containment cell
11 operation and maintenance. And the containment cell
12 again is the containment cell that was constructed
13 during the removal action in which we placed the
14 sediments and creek bottom soils from Dead Creek. A
15 monitoring well network to monitor ground water and
16 institutional controls for Sites G, H, I South and L
17 and institutional controls can consist of anything
18 from fencing to deep restriction. It's to limit
19 access to the sites. Estimated construction time
20 and cost, this alternative is estimated around \$3.1
21 million and estimate to take 3-6 months to
22 implement.

23 Alternative 3 consists of all the elements I
24 just described in Alternative 2. Plus, it's going

1 to include or it includes the full DNAPL recovery
2 that I mentioned at site I South. It includes RCRA
3 super C caps at sites G, H and I South and L. And
4 for G west an asphalt pavement. And then utility
5 relocations along the Queeny Avenue between Sites I
6 South and H. And the estimated construction time
7 and cost is \$12.8 million and about one year to
8 implement. And as I pointed out before, you would
9 have the subtitle caps that you can see over sites
10 -- the areas in yellow, sites G, H, I South and L.
11 And just to give you an idea when I speak of a RCRA
12 Subtitle C Cap, I'm speaking of a multi-layer, low
13 permeability cover consists of -- here's a cross
14 section where it shows 24 inches of clay. Then you
15 also have like another liner and drainage and cover
16 like this.

17 Alternative 4 includes all the elements of
18 alternative 3 which I just discussed as well as in
19 addition it would include leachate control for sites
20 G, H and I South. Estimated time and construction
21 cost for Alternative 4 is \$22.5 million and
22 estimated time to implement is approximately a year.

23 This is just to point out where the leachate
24 control -- this is points G, H and I South. The

1 dots would be the wells we would place in there to
2 control the leachate from the site.

3 Now Alternative 5 includes all the elements
4 of alternative 2 which I mentioned previously. Plus
5 for alternative 5 it includes pulsed air biosparging
6 of the NAPL areas at sites G, H and I South. Under
7 G, H and I South down below there is the DNAPL
8 residual down towards bedrock where we would put in
9 the biosparge wells to introduce air so that it
10 cannot degrade contaminants making them less toxic.

11 This alternative also includes the full
12 DNAPL recovery at site I South and it would include
13 the 724 compliant soil or crushed rock caps at sites
14 G, H, I South and L. The estimated cost is \$14.8
15 million and time to implement is approximately one
16 year.

17 And just to clarify, when I mentioned the
18 time to implement, I should have clarified it as the
19 time to implement construction. Actual
20 implementation of the full remedy would take longer
21 than a year.

22 And this is just to give you an idea of the
23 network of the biosparge well to be placed at sites
24 G, H and I South.

1 In evaluating alternatives for the site EPA
2 has to evaluate the nine superfund criteria which
3 includes two threshold criteria of overall
4 protection of human health and environment and
5 compliance with federal, state ARARs or applicable
6 and relevant and appropriate requirements. There
7 are five balancing criteria: Long term
8 effectiveness and performance -- or permanent,
9 excuse me -- reduction of toxicity, mobility or
10 volume through treatment, short term effectiveness,
11 implement ability and cost. And then there's two
12 modifying criteria which is state acceptance and
13 community acceptance.

14 This is a summary evaluating nine criteria
15 against the five alternatives. And as you can see,
16 Alternative 1 which is the no action it does not
17 meet the criteria -- 9 criteria. Alternative 2
18 there's some partial, partially meets the criteria
19 but overall it does not meet the criteria so
20 alternative 2 was not further evaluated. So we
21 looked further at alternatives 3, 4 and 5. Between
22 alternatives 3, 4 and 5, alternative 3 did not meet
23 the criteria for reducing toxicity, mobility or
24 volume through treatment. And alternatives 4 and 5

1 did meet all the criteria and partially met the
2 criteria for reducing toxicity, mobility and volume
3 through treatment.

4 I want to point out a difference between
5 alternatives 4 and 5 is that alternative 5 reduces
6 the greatest mass of contaminants through treatment
7 which is pulsed air biosparging and that was one of
8 the greatest differences between alternatives 4 and
9 5.

10 So, again, this is just an overview of the 5
11 alternatives I just mentioned. And alternative 5 is
12 EPA's preferred alternative. EPA's recommending
13 alternative 5. It's protective of human health and
14 environment. It meets the state and federal
15 regulations of our ARARs, implementable. It reduces
16 toxicity, mobility or volume through treatment and
17 provides long term and short term effectiveness and
18 it's supported by the state of Illinois.

19 So the next steps, we're here tonight cause
20 we're presenting the proposed plan for cleanup of
21 the site and we're issuing a 30-day comment period
22 which began February 27th and runs through March
23 28th. The next step after the comment period EPA
24 will issue a record of decision documenting the

1 selected remedy. It will contain also a responsive
2 summary responding to all the public comments.
3 After that it's estimated that in 2014 we would
4 complete the remedial design and then in 2015 the
5 implementation of the remedial action and then
6 reviews are initiated five years after the start of
7 remedial action of the site.

8 As I mentioned, 30-day comment period has
9 started. It started on February 27th, runs through
10 March 28th. There are documents for review
11 available online in the Sauget Area 1 superfund
12 site, website, as well as the Cahokia public library
13 and at EPA region five record center.

14 As stated in the -- if you all got a copy of
15 the fact sheet and proposed plan, please send your
16 comments to Patty Krause and her address is included
17 in the handouts. And so now --

18 MS. KRAUSE: Yeah. Questions, you know,
19 general questions about the public comment period.
20 If you have any questions before we go into the
21 actual public hearing cause the public hearing is
22 when we compile everything and then we have to
23 respond to them at the end of it through the --

24 MS. LINEBAUGH: Responsive summary.

1 MS. KRAUSE: -- responsive summary. So if
2 anyone has any questions.

3 AUDIENCE MEMBER: Yes. I wanted to make
4 sure because I want my questions to have answers and
5 they relate to what you -- what you do because we
6 need the answers in order to prepare the public
7 comment. First of all, I wanted your chemicals of
8 concern include Benzene, chlorobenzene, dieldrin,
9 which I don't know what it is, NAPL, PCBs and Dioxin
10 yet your public notice did not mention any of these
11 chemicals and referred to just contaminated soil and
12 tar like liquids and I was wondering why.

13 MS. LINEBAUGH: There was a huge amount of
14 different contaminants at the site. The Benzene,
15 chlorobenzene, PCBs and dioxins were the primary
16 ones with the more toxic that were the risk drivers
17 but there were numerous other ones that were also
18 looked at. The tar like substance that's spoken
19 about in the fact sheet is the DNAPL, dense
20 nonaqueous phase liquid that I just mentioned.

21 AUDIENCE MEMBER: What are the different
22 contaminants that are included in the DNAPL?

23 MS. LINEBAUGH: It's primarily the
24 chlorobenzene.

1 AUDIENCE MEMBER: Shouldn't the public,
2 shouldn't they know that because if they read the
3 public notice in the Belleville paper they don't
4 know to be concerned about Benzene or Dioxin or
5 anything if they just read tar like stuff in ground
6 water.

7 MS. LINEBAUGH: Well, there's also a
8 proposed plan that's more detailed that I believe
9 you have a copy of too that has more information.
10 What was mailed out was more of a simplified fact
11 sheet.

12 MS. KRAUSE: Yeah. It was mailed out and
13 it's more of a simplified fact sheet to just share
14 details of what's being done. But the actual full
15 length proposed plan is on the website and you can
16 access it. In fact, I think I brought a copy of it
17 here too.

18 AUDIENCE MEMBER: I'm confused about how
19 many different sites there are. I mean, they're
20 labeled with letters and there's area one and area
21 two and there's a CERCLA site and a RCRA site.
22 Could you tell us how many total sites there are and
23 how they relate to each other?

24 MS. LINEBAUGH: I can. Well, I can do my

1 best. It is somewhat complicated. I mean the site
2 has been around for a number of years but the letter
3 usage for each site it began I think with the state
4 of Illinois naming it back in the early nineties
5 with the creek. The creek was broken into different
6 segments A through F and once we went through A
7 through F then the next site was G, H, I -- L, M and
8 N. I don't recall J.

9 AUDIENCE MEMBER: There's some letters that
10 are missing and I was wondering if there was a site
11 that was named that at one time and it just
12 disappeared or was cleaned up.

13 MS. LINEBAUGH: Honestly, I don't recall a K
14 or a J.

15 AUDIENCE MEMBER: They were probably
16 investigation --

17 MS. LINEBAUGH: They might have been
18 investigated early on like in site investigation and
19 then determined not to have any issues. It's
20 possible. I can look in to that question. But just
21 to also clarify you mentioned -- just to clarify,
22 you also mentioned that there was a CERCLA site and
23 a RCRA site. The one with the big black loop that's
24 the Sauget area one site and all the parties. The

1 green is the RCRA site which is the Krummrich
2 facility. And this kind of aqua color is the Sauget
3 area two site which is separate from area one. So
4 there's two superfund sites and one RCRA facility.

5 AUDIENCE MEMBER: What are the ARARs? It
6 was referred to in the plan and I looked it up on
7 the EPA website but I don't understand how it
8 applies to the site?

9 MS. LINEBAUGH: Well, one of our threshold
10 criteria is meeting the ARARs, which is just the
11 appropriate and -- applicable or relevant and
12 appropriate requirements.

13 AUDIENCE MEMBER: Again?

14 MS. LINEBAUGH: Applicable or relevant and
15 appropriate. It's one of our -- they're federal and
16 state requirements. I mean there's a big list that
17 we included and evaluated in the feasibility study.
18 I can get you the full list if you'd like. That's
19 available. The feasibility is available in the
20 Cahokia library as well.

21 AUDIENCE MEMBER: Is that specific to a site
22 or is that generic for the whole country?

23 MS. LINEBAUGH: We evaluated those for each
24 site. Not -- each site like each lettered site, not

1 the site as a whole.

2 AUDIENCE MEMBER: Could you explain the
3 pulsed air biosparging? It's a little confusing to
4 me. I don't understand it. And you say in your
5 plan that three has -- it might not be appropriate
6 so in five if you discovered that it's not, then you
7 would go use 3 would be your recommended but I don't
8 know what it means and I don't know why it might not
9 be appropriate.

10 MS. LINEBAUGH: So your question for
11 alternative 5 which includes the pulsed air
12 biosparging which one of the largest ongoing sources
13 is below sites G, H and I deep in the bedrock.
14 There's this DNAPL residual and the best way to
15 treat that is by aerobic degradation. So we're
16 going to install wells to force air down there to
17 help degrade the contaminants and make them less
18 toxic. What you brought up is that alternative 5 is
19 our preferred alternative. With the pulsed air
20 biosparging they're going to do a pilot study to
21 make certain that this will work. If the pilot
22 study is effective they'll fully implement the
23 pulsed air biosparging throughout the site. If it's
24 not effective, then the alternative would be

1 alternative 3 which is just caps, the full caps
2 over -- the RCRA Subtitle C caps over sites G, H and
3 I South and L.

4 AUDIENCE MEMBER: You said south?

5 AUDIENCE MEMBER: What chemicals are
6 generated by the system? These are emitted into the
7 atmosphere, right?

8 MS. LINEBAUGH: Yeah. I'm going to have
9 Phil Smith who is the consultant --

10 MR. SMITH: Yeah. We work for EPA. What
11 goes on with biosparging is we're actually injecting
12 air which you know is 20% oxygen. The oxygen then
13 dissolves into the ground water. And then the
14 contaminants in the ground water, the bacteria start
15 using an aerobic process using the oxygen to break
16 down those contaminants. It's predominantly
17 Chlorobenzene and 1, 4-Dichlorobenzene. They're the
18 big players. They're the main mass of contaminant
19 that is moving in the ground water. So we want to
20 go into those source areas, the DNAPL area, that's a
21 substantial area, that's saturated throughout the
22 entire water table all the way down to the bedrock.
23 So if we pulse air into there, that will dissolve
24 the ground water. The ground water will move

1 through the aquifer, through the soil where that
2 contaminant is and the bacteria and it will start
3 basically eating, biodegrade it down to carbon
4 dioxide and water and chloride.

5 AUDIENCE MEMBER: Does that get in to the --
6 you called it a DNAPL, the tar like substance,
7 right? Are you treating just the contaminants and
8 the ground water.

9 MR. SMITH: It will treat them both. The
10 beauty of the way it works is that you go after the
11 dissolved phase first, right, the DNAPL. That's the
12 solvent exists in a pure phase but it's constantly
13 dissolving with the water according to its
14 solubility and concentration. So insolubilized new
15 water, the bacteria then eats the dissolved portion
16 and more dissolves off of the pure phase the DNAPL.

17 AUDIENCE MEMBER: So it's not going directly
18 after the tar like substance?

19 MR. SMITH: That's what we're hoping it will
20 do. Obviously, we have to do a pilot test and try
21 it out in a small area. And it takes a considerable
22 amount of time, it will take six or nine months
23 before the bacteria grow the population big enough
24 to really do the good biodegradation work. That's

1 the uncertain part that Stephanie mentioned and we
2 have a contingency in case it doesn't work.

3 AUDIENCE MEMBER: How do you measure the
4 effectiveness?

5 MR. SMITH: We'll be setting -- there's a
6 whole -- if you go to one of the websites the
7 feasibility has an appendix that talks about --
8 actually has a plan already set in place for a pilot
9 test and it details it out. Basically, we're going
10 to go in sparge in there at 3 different levels and
11 then put in monitoring points at certain distances
12 within a certain radius out in a couple of
13 directions and then see, you know, I don't remember
14 exactly, but say it's 15 or 30 feet away how you
15 measure concentrations before we turn it on we
16 measure at one month, three months, six months to
17 see how it's doing.

18 AUDIENCE MEMBER: You won't be able to
19 measure exactly how the tar like substance is quote
20 dissolving though?

21 MR. SMITH: We can go back and do that too.
22 We can take soil samples and compare before and
23 after.

24 AUDIENCE MEMBER: I thought the tar like

1 substance was in the rock?

2 MR. SMITH: That's a different issue. There
3 is a small area, Site I, that has it in the rock,
4 we're going to pump that out. But most of this
5 contaminant mass is actually in the sand and soils
6 down below bedrock so that's really where they're
7 going.

8 AUDIENCE MEMBER: You referred in your plan
9 to investigations that were done by the PRPs and
10 disposal areas downgrade in ground water, surface
11 water, air and soil and then later supplemental
12 relating to principle threat waste, treatability of
13 DNAPL and ground water, et cetera, et cetera. The
14 results of all the studies were evaluated and
15 compiled into the final RIFS report. And then you
16 said that you also did -- EPA also conducted its own
17 investigations in some areas during this period.
18 And I would like to know which investigations were
19 done by EPA and was there ever a discrepancy between
20 what EPA found in the PRPs?

21 MS. LINEBAUGH: I don't --

22 MR. SMITH: EPA did a number of test digging
23 within the sites.

24 AUDIENCE MEMBER: I'm sorry?

1 MS. LINEBAUGH: We did do some test digging
2 or trenching.

3 MR. SMITH: Test digging is basically
4 digging a trench, taking soil samples and recording
5 what you're seeing. So it was more trying to
6 identify the waste present. So I don't recall
7 precisely what it found other than yeah, there's
8 waste down there and a lot of chemicals in there.

9 MR. MARTIN: I think that we were trying to
10 identify the exact amount.

11 MR. SMITH: That's probably, yeah.

12 AUDIENCE MEMBER: Was there ever discrepancy
13 in what they reported and what you found?

14 MR. MARTIN: I don't think that would be
15 the -- if we're trying to find a boundary, realize
16 that when the industry is going out there with their
17 consultants to take samples we always -- my company
18 represents US EPA. We have somebody on site
19 simultaneously and we will take split samples, we
20 will be observing, so whatever they see we see. So
21 there shouldn't be any discrepancies.

22 MS. LINEBAUGH: There's EPA oversight during
23 their work.

24 AUDIENCE MEMBER: What are all of the

1 chemicals of concern that are considered DNAPL?

2 MS. LINEBAUGH: I'm sorry?

3 AUDIENCE MEMBER: What are the constituents
4 that are present that are considered DNAPLs?

5 MS. LINEBAUGH: Well, the chemicals in the
6 DNAPL?

7 AUDIENCE MEMBER: Right.

8 MS. LINEBAUGH: It's the chlorobenzene and
9 1,4-Dichlorobenzene.

10 AUDIENCE MEMBER: I have other questions if
11 you want to take a break for someone else to ask
12 questions.

13 MS. LINEBAUGH: I think this gentleman has a
14 question.

15 AUDIENCE MEMBER: The PRPs they get to vote
16 on this or they have to accept what you guys decide
17 and what the community puts in?

18 MS. LINEBAUGH: They can provide comments
19 during the comment period as well and then we
20 respond to their comments too.

21 AUDIENCE MEMBER: They don't get a vote?

22 MS. LINEBAUGH: They don't get a vote, no.
23 They just get a time to comment but they don't make
24 a decision.

1 AUDIENCE MEMBER: Thank you.

2 AUDIENCE MEMBER: You mentioned in the
3 handout that there was -- that the Dead Creek
4 cleanup was completed and the final report was
5 issued in 2010. Is that report on the website?

6 MS. LINEBAUGH: It's final. It should be on
7 the website.

8 MS. KRAUSE: It's on the website. There's a
9 fact sheet and I think there's also a link to the
10 report. So I mean pretty sure, yeah.

11 AUDIENCE MEMBER: And the cleanup of Dead
12 Creek is that also the case with respect to Borrow
13 Pit Lake?

14 MS. LINEBAUGH: Yeah. That's the same time.

15 AUDIENCE MEMBER: Okay.

16 MS. LINEBAUGH: Okay. Any other questions?

17 AUDIENCE MEMBER: I spoke to you and spoke
18 to Ken Bordeaux who's with the RCRA site, right?

19 MS. LINEBAUGH: Correct.

20 AUDIENCE MEMBER: He said due to IDOT
21 pumping that there had been contaminants from Sauguet
22 drawn up into the ground water in East St. Louis and
23 I was wondering if you've evaluated how the pumping
24 of ground water either by IDOT or in conjunction

1 with the proposed groundwater comes for the relief
2 wells for the Southwestern Illinois Levy project
3 will impact the contaminants including the DNAPLs?

4 MS. LINEBAUGH: The IDOT wells are located
5 in this direction (indicating). When they're
6 pumping they're pulling the main ground plume from
7 area one and the Krummrich site, kind of comes in
8 this direction towards the river. The pumping does
9 cause it to come in this direction (indicating). We
10 do have a regional groundwater model that we had
11 PRPs performed. We had run that model last year
12 based on IDOT's pumping and turning those wells back
13 on. So based on that and working with Ken cause a
14 lot of it pertains to the Krummrich facility and not
15 the CERCLA site I know Ken is working with --

16 AUDIENCE MEMBER: Last year was record lows.
17 I mean historic lows so that would not reflect
18 really serious pumping by IDOT in 2012. But in 2011
19 there were record highs, I mean through -- I think
20 there were -- it was at flood stage several months
21 of the year, at or above flood stage. So wouldn't
22 that -- I mean wouldn't your results be faulty for
23 2012?

24 MS. LINEBAUGH: We just have to re-evaluate

1 the model based on the pumping capacity of IDOT
2 wells. So it didn't change the model, so it
3 wouldn't effect.

4 AUDIENCE MEMBER: So it reflects like if the
5 river were at flood stage for much of the year which
6 it could end up being that way next year or the year
7 after given climate change?

8 MR. SMITH: I could add a little bit more.
9 The IDOT wells are fairly far north here. And when
10 we ran the model as well as looking at the plume,
11 dimension and the geometry it does effect it. It
12 pulls the plume a little bit to the north but it's
13 not nearly enough to pull it all the way to the
14 well. So they're not actually pulling out
15 contaminated water on the site. All they're doing
16 is making our ground water slide a little bit north
17 to like site P there. So -- and that's done under a
18 variety of scenarios in terms of that model. And
19 it's a very robust model. It can run under many
20 different conditions. So my estimation is there's
21 no way even under very extreme cases it could
22 actually pull ground water and actually pull it into
23 our wells. And we do know where the plume is. We
24 have a long history of and some of the maps in the

1 remedial investigation will show the geometry of
2 that plume. So we know where it is. We know how
3 it's been affected over the many years.

4 AUDIENCE MEMBER: But you're referring only
5 to the IDOT wells? You're not referring to the
6 proposed relief wells that the Levy District is --

7 MR. SMITH: That's another issue.

8 AUDIENCE MEMBER: So how are you taking that
9 into account?

10 MR. SMITH: You want to speak to the
11 proposed wells?

12 MS. LINEBAUGH: The Army Corps has proposed
13 installing wells on the Levy for relief and EPA
14 commented on that and they were advised that last
15 year we commented again. So that is our plan to
16 implement those relief wells.

17 AUDIENCE MEMBER: Have you read their
18 responsiveness summary because they just issued the
19 401 Water Quality Certification and they pretty much
20 dismissed your recent findings. They're going back
21 to saying what happened years ago rather than what's
22 currently happening.

23 MR. LAKE: I haven't read the responsive
24 summary. I don't know what they said exactly. I'm

1 Paul Lake from the Illinois EPA. And they've had a
2 large investigation all along the Levy including the
3 Sauget area here and they are aware of the
4 contaminants in the ground water and, you know, are
5 trying to deal with them the best they can. If they
6 collect the water in the relief wells and they
7 discharge it to the surface water they'd have to
8 make the surface water --

9 AUDIENCE MEMBER: State of Illinois is
10 saying that it's a quote transfer of water and
11 they're not requiring them to have a discharge
12 permit.

13 MR. LAKE: Well, that's a Bureau of Water
14 decision. I work in the Bureau of Land so that's
15 news to me. So I will have to talk to them but that
16 would be the standard way, the way I described it is
17 the way it has to happen. You know, in a flood
18 situation there's other issues there. There's other
19 sources of contaminants that are forced into the
20 surface water just due to the pressure from the
21 underground water. So that must be part of their
22 reasoning I imagine.

23 MS. LINEBAUGH: I just wanted to add real
24 quick that currently what we're proposing for the

1 area one site is for the soil and ground water
2 source areas and we're also in the process of
3 looking at soil and ground water source areas in the
4 area 2 site down here (indicating) and that the
5 ground water between the two sites will be addressed
6 regionally in a separate RCRA decision. So I think
7 some of your questions are pertaining to the ground
8 water in general and not to what's being proposed
9 today.

10 AUDIENCE MEMBER: Yeah. It's hard when the
11 river is up the contaminants flow east and when it's
12 down it flows west. So we don't know. Everything
13 is mixing. So to put a line at the top of the land
14 that it's, you know, that it's separate, we don't
15 know what's happening way down below. So I think we
16 need to address this comprehensively rather than,
17 you know, separate.

18 MS. LINEBAUGH: And that's what we are
19 doing. Regionally we're addressing the ground water
20 between the two sites because there are commingled
21 contaminants but that would be a separate decision
22 document.

23 AUDIENCE MEMBER: You're proposed -- their
24 proposed IEPA's proposed or not IEPA, the flood

1 district's processed wells are from 64 to 93 feet
2 and you've got your 30-foot shallow hydrogeologic
3 unit and then all of them seem deeper than the
4 shallow hydrologic unit and some of them are deeper
5 than the middle. And so the potential as you
6 explained it when you're going down and bringing
7 these things up, the potential seems to me that it's
8 very deep since the way you explained it is that
9 it's heavier, the contaminants for the DNAPLs are
10 heavier and go to the bottom. They're like stirring
11 up stuff that is already down there and is not
12 available.

13 MS. LINEBAUGH: Well, the DNAPLs are in the
14 area one site. What you're speaking of is the
15 levies over closer to the river and that's not going
16 to effect -- the DNAPL is not going to pull the
17 residual DNAPL from the area one site if that's what
18 you're --

19 AUDIENCE MEMBER: There are no DNAPLs in
20 area two?

21 MS. LINEBAUGH: Again, this is separate from
22 what we're discussing tonight but there is a DNAPL
23 on site P as well as in the Q south area. That's
24 not going to effect the ground water.

1 AUDIENCE MEMBER: On the site, the one that
2 you pointed to first, that's very close to the East
3 St. Louis pumping station where they're going to be
4 pumping things to so -- and the relief wells are
5 bringing up the water left standing and it's just
6 traveling above ground on the ground and people -- I
7 see kids walking. There are people -- this is part
8 of comment and I'll get in to that later but that's
9 a concern and I hope it's addressed.

10 MS. LINEBAUGH: Since some of your questions
11 are pertaining to a different site can I see if
12 there's any other general questions.

13 AUDIENCE MEMBER: Once the cleanup is
14 completed will the sites be safe for construction?

15 MS. LINEBAUGH: Well, for the area one sites
16 there currently is for I South is already used and
17 utilized for truck parking. So they would -- the
18 design of the cap would allow for continued use of
19 the truck parking for this facility.

20 AUDIENCE MEMBER: But for sites that don't
21 have any construction on them?

22 MS. LINEBAUGH: Well, there will be
23 restrictions for -- with any cap there would be
24 restrictions for going subsurface.

1 AUDIENCE MEMBER: For each site will they
2 provide the restrictions?

3 MS. LINEBAUGH: Yeah. Each site will have
4 controls tied to each specific site.

5 AUDIENCE MEMBER: So at this time you won't
6 know what the restrictions for each site would be?

7 MS. LINEBAUGH: During the design we'll do
8 more of an instrument control plan that will fully
9 identify those restrictions.

10 MS. KRAUSE: I'm thinking that maybe we
11 should take a few minute break and then start the
12 public comments. Some of these things will probably
13 be on the record as public comments that we will
14 respond to in the responsiveness summary.

15 AUDIENCE MEMBER: Can I ask a few more
16 questions. Site H has variant. Is that
17 radioactive? Is that problematic in that respect?

18 MS. LINEBAUGH: No, it's not. We did a risk
19 assessment for all the sites. There's not a concern
20 with risks associated -- you know what, there might
21 have been some -- actually now I'm remembering some
22 risks associated based on variant but it was based
23 on pathway for direct contact which would be with
24 the implementation of the remedies we could

1 eliminate that pathway.

2 MR. MARTIN: Site H.

3 MS. LINEBAUGH: Site H, yes.

4 AUDIENCE MEMBER: You said that you're going
5 to send the DNAPLs to be incinerated off site.

6 Where?

7 MS. LINEBAUGH: Well, they're currently
8 pumping the pulled NAPLs and it's being shipped off
9 site. I don't remember the name of the facility off
10 the top of my head.

11 MR. MARTIN: I don't know.

12 AUDIENCE MEMBER: Is it local?

13 MS. LINEBAUGH: Is it Mobile?

14 MR. SMITH: I don't recall.

15 MS. LINEBAUGH: I'm sorry. I don't recall
16 off the top of my head. I could find that out and
17 respond to you. I don't know off the top of my head
18 but it's shipped. It's not local, I don't believe
19 but I don't know.

20 MS. KRAUSE: Anybody? You want to take just
21 a few minutes?

22 (Whereupon, there was a break in
23 the proceedings. The testimony
24 resumes as follows:)

1 MS. KRAUSE: Okay. Whoever would like to
2 make a public comment stand up, say your first and
3 last name, who you're affiliated with, if any, you
4 know, and then our transcriber will take down your
5 comments and it will become part of the record and
6 will become part of our responsive summary on the
7 response list. So anybody want to be first?

8 AUDIENCE MEMBER: She was taking notes
9 during -- I request that that be put into the
10 official record, any questions and answers from the
11 question period.

12 MS. KRAUSE: And what's your name?

13 AUDIENCE MEMBER: I'm sorry. My name is
14 Kathy with a K, Andria, A-N-D-R-I-A. I'm president
15 of the American Bottoms Conservancy. And I'm also
16 conservation chair for the Kaskaskia Group of the CR
17 Club.

18 MS. KRAUSE: Anybody else.

19 AUDIENCE MEMBER: I have some more. What if
20 the levy breaches and we have a major flood? The
21 levy project is grossly underestimated at 100-year
22 flood not accounting for climate change and higher
23 river levels due to flood plain development, higher
24 levies upstream, river navigational structures, and

1 more intense levered events. A peer reviewed
2 scientific report states that a 100 year flood could
3 be some 4 feet higher than what is being proposed by
4 the levy project. Shouldn't you have had an
5 alternative that includes removal of the
6 contaminants from the flood plain? I'm trying to
7 find things that I didn't ask.

8 You say that a separate OU will be proposed
9 for the contaminated soil, the area wide ground
10 water contamination will be addressed as a separate
11 OU which will be proposed and set forth in a
12 separate ground water run for the Sauget area one
13 and Sauget area two sites. When will that be
14 proposed?

15 We believe that your exposure assessment
16 should add subsistence fissures, which it has not.
17 It just refers to fissures. And also hikers and
18 wildlife and nature observers.

19 MS. KRAUSE: Does anybody else -- anybody
20 else like to make a comment?

21 AUDIENCE MEMBER: Yes, sir. Jack Norman. I
22 hope that in the end you will be able to leave a
23 good description of how the contaminant plume or
24 plumes and three dimensions has been located and

1 characterized. Seems to me that's a very important
2 part of the process and the public, among others,
3 ought to wind up having confidence that we know what
4 we're talking about.

5 AUDIENCE MEMBER: There's a wall that I
6 think is site Q -- is it site Q that has a wall?

7 MS. LINEBAUGH: Site R.

8 AUDIENCE MEMBER: Site R. Should more walls
9 be constructed to keep contaminants of concern from
10 migrating either from higher river levels of ground
11 water pumping and should that have been an
12 alternative considered? Also, you require the O & M
13 requires quarterly sampling of selected monitoring
14 wells with analysis for VOCs, PCBs and metals and I
15 was wondering if more frequent monitoring would be
16 advisable and also would like to know who would do
17 the sampling? And I would hope there be split
18 samples or EPA oversight on that.

19 Wouldn't it be advisable to add more wells
20 north of the site because of the IDOT pumping?

21 One of the things that I asked about was the
22 incineration and we do have a hazardous waste
23 incinerator in Sauget and that's why I asked where
24 it would -- where your DNAPLs would go. And I

1 wanted to put on the record that recently VIOLIA
2 received a finding of violation in August 2012 for
3 violations of the Clean Air Act after an on-site
4 compliance investigation conducted by EPA's National
5 Enforcement Investigation Center in December 2011.
6 EPA found significant problems with Veolia's feed
7 stream analysis where a high percentage of Veolia's
8 waste profiles were found to be inaccurate. In some
9 of the waste profiles Veolia estimated the actual
10 metals concentration -- underestimated the actual
11 metals concentration in the way stream. Inspectors
12 also found that Veolia used generic waste profiles
13 for waste streams that contain volatile and
14 semi-volatile metals. The use of overly broad
15 standard profiles leads to incorrect metals
16 concentration being used to calculate the feed rates
17 for the incinerators. They also used several
18 profiles that used metals concentration identical to
19 those used in other profiles which according to EPA
20 is statistically unlikely. Veolia has a history of
21 violation and its non-compliance and their past
22 record offers no basis to expect satisfactory
23 performance in the future. I would really like for
24 the agency to -- to not consider sending what you're

1 finding, the toxins at Sauget area one, to the
2 Veolia incinerator.

3 MS. KRAUSE: Anybody else for comments.

4 AUDIENCE MEMBER: I'm Shawn Abernathy. I
5 represent the Laborers Local 100. Having
6 territorial jurisdiction to the sites in question my
7 members have been involved in other sites in the
8 area including Dead Creek and site 2 slurry wall
9 project. My members not only have a vested interest
10 in ensuring that the project is done and performed
11 in a responsible manner but are also interested in
12 securing the jobs that come with it. My members
13 exceed all the training standards and experience
14 required in this field. It is my hope that my
15 members be given -- be given a chance, you know, to
16 work on the project.

17 MS. KRAUSE: Anybody? Thank you. Anybody
18 else?

19 AUDIENCE MEMBER: I very much appreciate
20 that you had this public hearing and we are really
21 very grateful to all the people that are putting in
22 their time and we are also grateful to Solutia for
23 stepping up and being proactive in working on
24 identifying the chemicals and coming up with

1 solutions. I really don't know, I think that there
2 are other PRPs in there and we're trying to
3 determine whether if the levy districts get involved
4 and bring up contaminants whether they would be a
5 potential PRP. Everybody thinks it's an interesting
6 question but we don't have a legal opinion yet. But
7 I appreciate the work and thank you for holding the
8 hearing and for allowing us to make our comments and
9 answering my questions especially.

10 MS. KRAUSE: I'm going to say the public
11 hearing is ended. And thank you for coming and
12 thank you Village of Cahokia for this really great
13 facility. We appreciate it. Thank you.

14
15 (Off the record at 7:45 p.m.)
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17
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23
24

1 State of Illinois

2 SS.

3 County of Madison

4 I, Mary L. Peppenhorst, a Certified Court
5 Reporter in and for the State of Illinois, duly
6 commissioned, qualified and authorized I hereby
7 certify that I was attended at the offices of
8 Cahokia Village Hall, 103 Main Street, in the City
9 of Cahokia, State of Illinois, by the aforesaid
10 parties; on the 5th day of March, 2013.

11 Said public and EPA comments being by me
12 reported in shorthand and caused to be transcribed
13 into typewriting, and that the foregoing pages
14 correctly set forth the comments of the
15 aforementioned, together with the questions
16 propounded and remarks thereto, and is in all
17 respects a full, true, correct and complete
18 transcript of the questions and propounded to and
19 the answers and comments given by attendees.

20 I further certify that I am not of counsel
21 or attorney for any of the parties, not related to
22 nor interested in any of the parties or their
23 attorneys.

24

Completed this 10th day of March, 2013.

Mary L. Peppenhorst

Mary L. Peppenhorst

Missouri Certified Court Reporter

Illinois Certified Shorthand Reporter

Registered Professional Reporter

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